The right side of the first fall appears passable; on the left side there is an abrupt drop. This barrier could be easily manipulated or laddered. Above this fall there is about one half mile of rapids leading to the second fall, which is impassable (10 to 15 feet high). It is the beginning of a chute through a canyon, composed of minor falls and velocity barriers. Equipment would have to be brought in by back pack or helicopter; very rough cost estimate is over $40,000.

In the Stream Catalog of the eastern section of Ketchikan Management District of southeastern Alaska it is stated that the upper valley is relatively flat with only a slight gradient for several miles. It is also stated that escapements to this stream have varied from a few hundred to several thousand pink salmon. It may be that better years in the Red River could be a slop over from the main Marten River. In previous surveys on record, there is no mention of salmon ever being observed above the falls. U. S. Geological Survey is gaging this stream.

Lucky Creek -- This stream, located in Revilla Channel, has a drainage area of eight square miles. There are two small lakes on the north side of the accessible stream. Extensive muskeg areas are found throughout the watershed. A fairly complete stream (K-105) description may be found in the Stream Catalog of the eastern section of the Ketchikan Management District of southeastern Alaska.

Lucky Creek has had excellent recorded escapements of pink and chum salmon; some coho and sockeye salmon also enter the system. In the Ketchikan District Stream Catalog it is stated that there are cataracts consisting of three, four foot to five foot falls separating a lower and an upper smaller fall. The lower fall is listed as 15 feet high; the upper fall as eight feet high. Because of rough water in Revilla Channel, we were unable to land to accomplish a foot survey. From the air, however, it appeared that spawning area above the falls was adequate to justify laddering. It also appeared, the fall was divided into two parts. There seems to be adequate bedrock outcrop in which to anchor steeppasses.

No estimate of cost can be made for this system until a ground survey is completed.

Aiken Creek -- This stream (K-137) is located in Moira Sound, North Arm Aiken Cove, southwest head. It is mainly a pink and chum salmon stream, with some coho and a few red salmon also entering the system. Watershed area is close to five square miles.

In the early 40's, 135 acres or four percent of the watershed, were cut-over. A tractor road across the stream, near the mouth swings well away from the creek until it arrives in the basin where the creek divides. The stream drains a gravel filled valley, bounded by steep, abrupt rugged slopes. A fairly large high altitude lake may afford some stability of flow. The tidal zone stream channel is well confined with gravel and gradient suitable for spawning. From tidewater to the fall the creek is also well defined, fairly fast-flowing with coarse gravel. Tractor roads have stabilized and are growing up to reproduction and alder.

On our visit, the stream was well above normal levels (150 second feet), and the fall, at one quarter mile, appeared to be impassable. However, on normal water levels, the fall may be passable. This fall is 7 to 8 feet high and would not be difficult to ladder. Water levels were so high it was difficult to see the bottom. Therefore, a return visit is needed to this stream to determine the extent of spawning gravel above the falls. Such gravel would not have to be very extensive to justify laddering, since the project appears to be a very reasonable one.

Biscuit Bay -- Stream number 258 enters Biscuit Lagoon about one quarter mile below the head on the east shore. It is reported to have runs of pink, chum, coho, and sockeye salmon. The stream runs from six tenths to nine tenths miles from tidewater to a 120 acre lake. The drainage area consists of four and one half square miles. This lake is shallow at one end, deeper at the other. There appears to be adequate spawning gravel in the inlet tributaries at the head of the lake. Starting at the lake and going downstream to tidewater, there is a fall area with logs piled on top (see photo). A partial barrier five feet high, then more falls in bedrock descending at least 10 feet from the top of the logs on the fall to the bottom of the cascades, with a run of 120 to 130 feet. Remedial work on this stream would consist of removal of log jams and debris. After this is accomplished and fish are observed, it may be necessary to modify the bedrock falls to a slight extent with either blasting or steeppasses, or both. John Galea estimates that log removal could be accomplished with blasting in one day, at an estimated cost of $250. He is writing a work plan for this project.

Staney Creek -- Staney Creek runs through a long flat valley. It was examined primarily from the standpoint of future monitoring. Although access to upstream areas is difficult, a helicopter can be landed at places spaced about every mile on the muskeg and gravel bars. Salmon spawn as far up and sampling should extend to five or six miles. There is excellent spawning area for at least this distance. Sampling required for monitoring would possibly have to be done at least for the first year, by means of helicopter drops, rather than attempting to hike the stream from tidewater.

Sarkar System -- At the Sarkar System we examined the falls, consisting of three steps between two lakes. There appeared to be about a 50 foot drop in 100 feet or so of run.

Doug Stinson surveyed the Sarkar Lake System in the spring of 1964. He concluded that the only barrier that appears critical is a rock falls about one and one half miles from the outlet. He stated that blasting was not feasible since a large area of rock would have to be removed. A fish ladder would be the most likely solution. Since we think that the stronger fish are negotiating the falls, and available spawning ground above the falls is limited, there is no great need for a ladder. This stream, and particularly the falls, should be surveyed during the escapement period. Also, the total available spawning area in the upper lakes and its tributaries should be determined. This information would be necessary for a final decision on what action, if any, should be taken.